WHAT IS CLAIMED IS:

~~Patent claims~~

1. Device for converting data sequences between FR format and ~~ATM~~ format, comprising

- an FR communication module (PIM) for connecting to at least one FR communication link,
- an ATM communication module for connecting to an ATM communication link,
- a central computer (FP) for controlling the FR communication module and the ATM communication module, and
- a buffer memory (PSSM), which is connected via an internal communication link to the central computer (FP), the FR communication module (PIM) and the ATM communication module.

2. Conversion device according to claim 1, characterized in that the internal communication link is a bus link.

3. Conversion device according to claim 2, characterized in that the bus link is a PCI bus link.

4. Conversion device according to one of the claims 1 through 3, characterized in that two separate bus links are provided for driving the FR communication module (PIM).

5. Conversion device according to one of the claims 1 through 4, characterized in that the central computer (FP) controls the data transmission between the FR communication module, the ATM communication module, the central computer (FP) and the buffer memory (PSSM).

6. Conversion device according to one of the claims 1 though 5, characterized in that the buffer memory (PSSM) is divided into a reception unit and a transmission unit.

7. Conversion device according to claim 6, characterized in that respectively one separate central computer (FP) is provided for purposes of controlling the conversion of the data sequences from the FR format into the ATM format and vice-versa.

8. Method for converting data sequences from an FR format into an ATM format by means of a conversion device, comprising an FR communication module (PIM) for connecting to an FR communication link, an ATM communication module for connecting to an ATM communication link, a central computer (FP) for controlling the FR communication module (PIM) and the ATM communication module, and a buffer memory (PSSM), comprising the steps

- reading-in the FR data sequences into the FR communication module (PIM),
- storing the data in the buffer memory (PSSM),
- converting the data in ATM format and reading out the same data by means of the ATM communication module,

whereby the operation of the central computer (FP) is not interrupted by the readin and readout process into/from the buffer memory (PSSM).

9. Method for converting data sequences from an ATM format into an FR format by means of a conversion device, comprising an FR communication module (PIM) for connecting to an FR communication link, an ATM communication module for connecting an ATM communication link, a central computer (FP) for controlling the FR communication module (PIM)

and the ATM communication module, and a buffer memory (PSSM), comprising the steps

- reading-in and desegmenting the ATM data sequence in [sic] ATM communication module)[sic],
- storing the data in the buffer memory (PSSM),
- converting the data in FR format and reading out the same data from the buffer memory (PSSM) by means of the FR communication module (PIM),

whereby the operation of the central computer (FP) is not interrupted by the readin and readout process into/from the buffer memory (PSSM).